Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
In the Matter of Petition of WorldCom, Inc.	)	
Pursuant to Section 252(e)(5) of the	)	CC Docket No. 00-218
Communications Act for Preemption	)	
of the Jurisdiction of the Virginia State	)	
Corporation Commission Regarding	)	
Interconnection Disputes with	)	
Verizon Virginia Inc., and for	)	
Expedited Arbitration	)	
	)	
In the Matter of Petition of AT&T	)	
Communications of Virginia, Inc.,	)	CC Docket No. 00-251
Pursuant to Section 252(e)(5) of the	)	
Communications Act for Preemption	)	
of the Jurisdiction of the Virginia State	)	
Corporation Commission Regarding	)	
Interconnection Disputes with	)	
Verizon Virginia Inc., and for	)	
Expedited Arbitration	)	

DECLARATION OF PATRICK A. GARZILLO

1.   My name is Patrick A. Garzillo. My business address is 1095 Avenue of

the Americas, New York, New York. I am the Vice President of Service Costs in the

Finance Department at Verizon. The Service Cost organization is responsible for

developing costs for services provided by Verizon. As Vice President, I am responsible

for managing and supervising the development, preparation and analysis of service cost

studies for retail and wholesale products and services, separations, and part 64/cost

allocations in all of Verizon's serving areas.

2.   I have over 30 years of experience with Verizon and its predecessor

companies. During this time, I have held a variety of positions of increasing

responsibility in various internal functional organizations, including Network

Engineering, Service Costs, Carrier Access Services, Special Services Operations, Retail Product Management and Market Management, and Wholesale Market Development for Competitive Local Exchange Carriers.

3. I hold a Bachelor of Science degree in Electrical Engineering Technology from the New York Institute of Technology, which I earned in 1969, and a Masters of Science degree in Management Science from Polytechnic University, which I earned in 1975. In addition over the past several years I have attended business and educational seminars at Duke University's Fuqua School of Business, University of Pennsylvania's Wharton School of Business, Brookings Institute and Columbia University.

4. The purpose of my declaration is to provide rates for switching and other UNEs as required by paragraphs 695, 697, and 701 of the *Memorandum Opinion and Order* issued by the Wireline Competition Bureau in the above-captioned proceeding on August 29, 2003 (the "*Order*"). I also explain the specific changes Verizon VA has made to its recurring cost studies for switching and other UNEs to implement determinations made in the *Order*.

5. Verizon VA has filed an application for review of the *Order* and a motion for stay with the Commission. Those filings describe a number of decisions in the *Order* that prejudge major policy issues now under consideration by the full Commission and do so in ways that are inconsistent with existing rules. In addition, the *Order* makes other errors, adopting extreme assumptions that were not supported by any party, or omitting adjustments that the *Order* itself recognizes should be made. Finally, a number of aspects of the *Order* are contrary to both Commission precedent and the record in this proceeding. In preparing its compliance filing, Verizon VA has implemented the

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determinations made in the *Order* to the extent possible, even where Verizon VA

disagrees with them. In a few instances, Verizon VA found it necessary to interpret the

Order as it modified its cost models. Below I describe the steps Verizon VA performed

to prepare its compliance filing, as well as the interpretations we made to implement the

Order. If the Commission grants Verizon VA's AFR, we will prepare new compliance

filings to reflect the corrected rates.

6.   Attachment A to my declaration is a summary of the rates for switching,

dedicated and common transport, access to OSS, DUF, subloops, the NID, enhanced

extended link testing, entrance facilities, dark fiber transport, dark fiber loops,

customized routing, and service management systems, calculated in accordance with the

requirements of the *Order*. Attachment B to my declaration documents each of the

changes to Verizon VA's recurring cost studies that is required by the *Order*, and

identifies how each change was implemented in the cost studies that Verizon VA is filing

simultaneously with this declaration. Those cost studies are contained on three CDs

accompanying my declaration. Verizon VA is also providing proprietary paper copies of

the files on CDs #1 and #2. (We have not provided paper copies of the files on CD #3

because they are so voluminous, and because this CD contains cost models and user

guides that have previously been filed with the Commission and provided to the parties.)

7.   To calculate the rates in Verizon VA's compliance filing, we began with

the final cost models submitted during this proceeding on November 2, 2001.[1] Verizon

VA then implemented the changes required by the *Order* as specified in Attachment B,

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[1]   Minor additional changes were made to these studies during the hearings.

and re-ran the cost models with the modified inputs and assumptions to produce the rates shown in Attachment A.

8.   *Switching:* For the switching rates, Verizon VA first identified quantities of total lines, trunks, PRI, and associated CCS usage from the final cost models submitted in the Supplemental Surrebuttal Testimony of Nancy Matt (dated October 18, 2001) and the Second Supplemental Surrebuttal Testimony of Nancy Matt (dated November 2, 2001). Those quantities included growth over the three years of the study period assumed in the models. Therefore, Verizon VA backed out the growth rates in order to obtain starting quantities for the compliance studies. Verizon VA then applied the growth rates specified in the *Order* for the assumed 12-year life of switching equipment to obtain the appropriate quantities for use in the compliance cost models. Lines and line usage were each grown at 2.5 percent per year. *Order* ¶¶ 404, 411. End office trunks and end office trunk usage were each grown at 3 percent per year. *Order* ¶¶ 412, 418. Tandem trunk ports were also grown at 3 percent per year, while tandem CCS usage was grown at 5 percent per year. *Order* ¶¶ 409, 418-19.

9.   After calculating the total number of lines based on the required growth rates, Verizon VA assigned those lines either as analog or as integrated digital lines using GR-303. As required by the *Order*, 21.1 percent of lines are assumed to be analog, while 78.9 percent of lines are assumed to be GR-303 digital for study purposes. *Order* ¶ 426. The recalculated quantities and analog/digital GR-303 breakdown were then input into the SCIS Model Office (SCIS/MO) cost model which produced investment dollar amounts for each of 23 switch investment output categories.

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10.   Verizon VA next calculated the effective discounts for getting started investments, trunk and SS7 investments, and other (primarily line ports and line usage) investments. The discount for getting started investment is based on the assumption of 100 percent new switches; the discount for trunk and SS7 investments is a weighted average based on the assumption of 85 percent new switches and 15 percent growth additions; and the discount for other switching investments is a weighted average based on the assumption of 88 percent new switches and 12 percent growth additions. The actual discounts for new switches are specified in Verizon Ex. 216P (confidential version) provided in response to staff record request no. 32. The discounts for growth additions for Lucent 5ESS and Siemens EWSD equipment are specified in Verizon Ex. 213P (confidential version) provided in response to staff record request no. 29. The discount for growth additions for Nortel DMS-100 equipment is specified in Verizon Ex. 100P, Vol. IX, VA Switch Discount Support, Exhibit Part C-P2, at 2 (confidential version). *Order* ¶ 390 n.1018, ¶ 399 n.1044, ¶¶ 401, 403, 405 n.1057, ¶ 406 n.1058, ¶¶ 409, 413, 415-16.

11.   Verizon VA then ran the SCIS/MO model three times (once for each of the effective discount levels – getting started, trunk/SS7, and other) for each of the three end office switch types (5ESS, DMS-100, EWSD) to determine the dollar amounts for each investment output category in each switch type at each discount level. Verizon VA produced similar runs for the two effective discount levels (getting started and trunks) for the two tandem switch types (5ESS and DMS-200). For the ten 5ESS offices that function both as end offices and as tandem switches, Verizon VA ran the SCIS/MO model once using only end office data and a second time using end office plus tandem

trunk data. The difference in investments between the two runs is attributable to the tandem function and was added to the tandem switching investment (discussed below). The results for all of the runs were collected on a spreadsheet. *See* file labeled "VA UNE Compliance Backup for Switching & Ports.xls" in folder "Part C-01 - Port & Features"; subfolder "*Support Documentation*" on CD #2.

12.   Verizon VA then assigned each of the 23 investment output categories to the appropriate discount level (getting started, trunk/SS7, other) in order to determine the amount of investment for that category. For each switch type, Verizon VA totaled the appropriate investment dollar amounts for the 23 investment output categories to determine the total material investment.

13.   Verizon VA further categorized the total port-related material investment by port type (POTS lines, ISDN BRI lines, and end office trunk, ISDN PRI trunks). The material investment associated with each port type was input into the VCost model. The VCost model applied EF&I, Power, Land, and Building investment loadings to identify total investment, and applied the annual cost factors (modified, as discussed below, in accordance with the *Order*'s determinations) to the investment. The model also applied the modified utilization, or "fill," factors required by the *Order* to line and trunk ports. *Order* ¶¶ 432, 434 n.1117. All line ports – both analog and digital GR-303 – were divided by the analog utilization factor. Verizon VA modified the weighting used in the utilization adjustment factor, as required by the *Order*, to reflect a weighting based on the total Virginia lines used in the investment studies. *Order* ¶ 436.

14.   Verizon VA identified the remaining non-port material investment and divided the amount by the total Virginia "effective" lines to produce the per-line amount.

Virginia "effective" lines are the sum of POTS lines, ISDN BRI lines, and PRI trunks (multiplied by 24 channels). Verizon VA performed additional calculations to develop monthly per-line costs for certain categories of costs that had previously been recovered in the minute of use rate element. For the end office trunk ports, Verizon VA first calculated the monthly unit cost per trunk (expressed on a per DS0 basis) based on the changes required by the *Order*. Verizon VA then multiplied the monthly unit cost per trunk by the total number of DS0 trunk ports in Virginia and divided by total Virginia effective lines. Verizon VA performed similar calculations for the Host/Remote Umbilicals and the SS7 Call Setup annual costs. Verizon VA developed the Switching RTU annual expense by multiplying the total Virginia compliance switching investment (end office and tandem) by the compliance RTU expense factor. Verizon VA then divided this annual cost by the number of Virginia effective lines to determine the per line cost.

15. The Flat Rated Switch POTS Line Port is composed of the following cost elements expressed on a monthly cost per line basis: line port, traffic sensitive switching, trunk port, umbilical, SS7, and RTU. To this subtotal, Verizon VA applied common overhead and gross revenue loadings to produce the compliance UNE Flat Rated Line Port. Verizon also calculated flat rated port rates for ISDN BRI, ISDN PRI, Coin, Unbundled Public Access Line, Switched DS1, and IDLC.

16. To develop rates for features, Verizon VA re-ran the SCIS/IN feature model with the required study input changes. First, for each feature that uses the Screen List Editing feature, Verizon VA used the same input for the number of SLE lines. Second, Verizon VA used the same growth rates as were used for line ports in the

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SCIS/MO model to grow line-related inputs in the SCIS/IN feature model. *Order* ¶¶ 491 n.1239, 493. As required by the *Order*, the inputs related to busy hour call attempts were identical to those in Verizon VA's proposed study. *Order* ¶ 420.

17.   Verizon VA developed the tandem switching material investment in the same manner as it developed the material investment for end office switching. As required by the *Order*, Verizon VA grew the SCIS/MO trunk port quantities 3 percent per year for the twelve year switch life and grew the trunk CCS (minutes of use) 5 percent per year Verizon VA assigned each of the investment output categories produced by SCIS/MO to one of two discount levels (either getting started or trunk/SS7). *Order* ¶¶ 399, 409, 418-19. Verizon VA further assigned the tandem trunk-related material investment to the Tandem Trunk MOU rate element and assigned the remaining tandem material investment to the Tandem Switching MOU.

18.   Verizon VA then derived the total annual tandem minutes of use by taking the busy hour CCS per trunk from the updated SCIS/MO runs and dividing by the Busy Hour to Annual Ratio (BHAR). Verizon VA computed the BHAR by taking the Busy Hour to Day ratio (BHDR) filed by Verizon VA (9.09%) and dividing by the effective calendar days from the *Order* (339). *Order* ¶¶ 456-457 n.1166. Verizon VA divided the annual cost for the Tandem Switching and Tandem Trunks by the annual tandem minutes to derive the per minute of use cost for each of these two tandem rate elements.

19.   Verizon VA also developed compliance cost studies for dedicated tandem trunk ports and dedicated and common TOPS trunk ports in the same manner as it developed costs for the end office flat-rated port, and for the tandem trunk and switching minute of use rate elements.

20. *Reciprocal Compensation:* The *Order* concludes that carriers "that pay a flat, per line port price for unbundled end-office switching should not . . . pay the incumbent LEC any additional amount for use of end-office switching to terminate reciprocal compensation traffic." *Order* ¶ 488. In other words, CLECs who purchase UNE-P do not have to pay Verizon VA for terminating reciprocal compensation traffic to the CLEC customer served by the UNE-P line, supposedly because Verizon VA receives a flat charge for use of its unbundled switch. The *Order* does not, however, address the converse situation, where a CLEC hands off traffic to Verizon VA to terminate to *Verizon VA's* customer. In this circumstance, Verizon VA obviously does not receive an unbundled end office switching charge on the terminating end of the call, and therefore is still entitled to receive reciprocal compensation to recover the cost of terminating the call.

21. As Verizon VA explained in its application for review, there are two scenarios where this issue arises. The first is when a customer that a CLEC serves using the UNE-P places a call to one of Verizon VA's retail customers; in this scenario, the costs that Verizon VA incurs to terminate the call to its retail customer obviously are not recovered in the flat-rate originating port charge paid by the CLEC on the originating end of the call (even if it were determined using the appropriate level of costs). The second is when a customer that a CLEC serves using its own switch places a call to one of Verizon VA's retail customers; in this scenario, the costs that Verizon VA incurs to terminate the call to its retail customer obviously are not recovered through an unbundled switching charge because the CLEC pays no unbundled switching charge on either end of the call. To eliminate any potential dispute, Verizon VA therefore has asked the Commission to

confirm that Verizon VA is entitled to impose a reciprocal compensation charge to recover costs for terminating such calls.

22.   Nevertheless, while Verizon VA believes that it is entitled under the terms of the *Order* to collect a reciprocal compensation charge on calls in these circumstances, the *Order* itself does not specify how a reciprocal compensation rate should be determined for these types of calls, and the evidence on the record is not sufficient to permit Verizon VA to calculate a new Meet Point A rate that would be consistent with the other determinations in the *Order*. Verizon VA therefore has submitted the existing Meet Point A rate that was set by the Virginia State Corporation Commission, and found to be TELRIC-compliant by the Commission, as a proxy rate in this compliance filing.

23.   Verizon VA developed the "Meet Point B" reciprocal compensation rate by adding to the Meet Point A rate the following costs: two tandem trunk MOU (one for the incoming trunk, one for the outgoing trunk), tandem switching, and common transport. In determining the investment on which these costs are based, Verizon VA included getting started costs and RTU fees, as required by the *Order*. *Order* ¶ 489. The development of this rate is shown on CD#2 in the Cost Study Documentation folder, subfolder Part C-10, file VA_Part C-10 Recip Comp EO - TDM Compliance updated 10-28-03.xls.

24.   As explained above, Verizon VA has asked the Commission in its application for review to address the issue of the reciprocal compensation charge that should apply in the call scenarios described above. If the Commission provides further guidance there with respect to the calculation of a reciprocal compensation charge to apply in these circumstances, Verizon VA will submit a further compliance filing

reflecting that guidance In any event, under the Commission's existing rules the rate that the CLECs can charge Verizon VA for reciprocal compensation for comparable call scenarios must mirror the rates established here. *See* 47 C.F.R § 51.711 ("[r]ates for transport and termination of telecommunications traffic shall be symmetrical" unless the CLEC proves on the basis of a TELRIC study that a higher rate is justified).

25. *Transport:* The *Order* required Verizon VA to develop IOF transport rates including DCS and multiplexing; including DCS only; including multiplexing only; and including neither DCS nor multiplexing. *Order* ¶ 511. As AT&T/WorldCom conceded in their opposition to Verizon VA's application for review, the IOF rate *should* include all DCS and multiplexing that is "necessary to originate or terminate the interoffice transport." Opposition of WorldCom, Inc. and AT&T Communications of Virginia, LLC to Verizon Virginia Inc.'s Motion for Stay and Application for Review at 78 (Oct. 14, 2003) ("AT&T/WCom Opp."). Verizon VA's IOF model includes *no* DCS or multiplexing that is *not* necessary. Therefore, the requirement to file the four separate options required by the *Order* is not warranted.

26. Nonetheless, Verizon VA developed rates for the four options for IOF transport as follows: Option 1 employs the service designs from the original Verizon VA study: IOF transport with an efficient mix of DCS and standalone multiplexing. Verizon VA developed these rates using its cost models with the changes required by the *Order* for each transport element option. Option 2 is IOF transport with DCS replacing standalone multiplexing. The only transport element that included some standalone multiplexing in its designs is DS1. Accordingly, in the revised DS1 cost study, Verizon VA substituted designs with DCS supplying the DS1 to DS3 multiplexing function for

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those designs that had used standalone multiplexing to perform this function. The rates for all other transport elements above DS1 remained the same, since there were no standalone multiplexing costs to remove. Option 3 is IOF transport with standalone multiplexing only, excluding DCS. In the DS1, DS3, STS-1, & OC3 cost models, Verizon VA eliminated all designs that used DCS to provide either multiplexing or automated connection functions and substituted equivalent designs using standalone multiplexing and/or manual connections. OC12 did not have any DCS in the designs and therefore required no change. Option 4 is IOF transport without DCS or multiplexing. There is no way to provision "DS1 transport" without multiplexing provided by either DCS or standalone multiplexing because the optical lines of interoffice SONET systems operate at capacities of DS-3 or higher. If the multiplexing is removed, the CLEC would actually obtain DS3 transport service. To convert that to the equivalent of DS1 transport, the CLEC would also have to order DS1 *loops* (not transport) and then provide multiplexing either by self-provisioning or obtaining multiplexing from Verizon VA, to connect those to the DS3 transport. *See* Non-Cost Hearing Tr. at 408-411 (Gansert). Thus, the DS1 rate for Option 4 is the DS3 rate. Eliminating all multiplexing from DS3 and higher capacity transport services could be accomplished only by eliminating the SONET terminal equipment altogether. This would leave bare interoffice fiber cable which is *not* functional transport. Since even AT&T/WorldCom do not request that result, *see* AT&T/WCom Opp. at 78, the Option 4 DS3, STS-1, OC3, and OC12 rates are the same as the Option 3 rates.

27. *Annual Cost Factors*: Finally, the *Order* required Verizon VA to calculate plant-specific expenses by multiplying the 1999 investment it used in developing its cost

factors by the relevant cost to booked cost ("CC/BC") ratios and eliminating the forward-looking-to-current ("FLC") factor used in Verizon VA's studies. *Order* ¶¶ 140-41. Appendix B set out the plant-specific CC/BC ratios calculated by the Bureau. In developing its compliance cost models, Verizon VA made certain changes to the ratios shown in Appendix B to correct typographical errors and inconsistencies. For example, Appendix B shows 1999 investment for COE (Digital) as $1,399,844,000. This is a typographical error – Verizon VA's actual investment as reported in ARMIS was $1,339, 844,000. Appendix B also reflects end-of-year investments in some accounts and average investments in others. It is appropriate to use average investments because the expenses used in developing the ratios are incurred throughout the year when different levels of investment are in place, not all on the last day of the year as using an end-of-year investment amount in the denominator would imply. Therefore, again using the COE (Digital) example, Verizon VA's investment on the last day of the year was $1,339,844,000, but the average investment over the course of the year was $1,295,585,910. For Poles and Conduit, Appendix B used end-of-year investments, but inconsistently used averaged investment for the cable accounts. Verizon VA corrected these inconsistencies by using averaged investments for all accounts.

28. For Circuit equipment, Appendix B specified a sub-account split different than Verizon VA's proposed sub-accounts of Sub Pair Gain and Digital Other. Verizon VA could not replicate the account split in Appendix B using ARMIS data, and because Verizon VA's cost models use the Sub Pair Gain and Digital Other sub-accounts, Verizon VA used its proposed investments and expenses modified by excluding the FLC and instead multiplying by the 1999 CC/BC ratios from Appendix B to develop the network

factors required. In its compliance studies, Verizon VA developed the plant-specific ratio for each plant type by following the *Order's* methodology, but correcting the investment figures where necessary. Attachment C to my declaration shows the ratios Verizon VA used in its compliance studies.

29.   Verizon VA also made the other adjustments to the annual cost factors required by the *Order*. In addition to eliminating the FLC, discussed above, Verizon VA eliminated forward-looking adjustments for copper maintenance, and for inflation and productivity. *Order* ¶ 141 nn.390, ¶ 392. Verizon VA also zeroed out the Wholesale Marketing factor, moved $106 million of network expenses to the Common Overhead factor discussed below, and eliminated the adjustment it had previously made for non-recurring expenses. *Order* ¶¶ 145, 146 n.401, ¶ 157. Verizon VA adjusted the Other Support factor to reflect the cost of capital and depreciation lives determined by the *Order*.
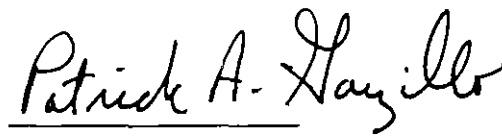
30.   The *Order* required various modifications to Verizon VA's Common Overhead factor, including the elimination of some costs, and the inclusion of other costs that previously had been accounted for in other factors. First, Verizon VA adjusted the Verizon-East Regional Common Overhead calculation by substituting the *Order's* cost of capital and depreciation lives associated with the relevant support investments, and by eliminating the FLC adjustment, as required by the *Order*. Verizon VA also included the Regional Wholesale Customer Services Expenses (minus the non-recurring adjustment) that had been included in its proposed wholesale marketing factor. *See Order* ¶¶ 104, 114, 139, 147. Second, Verizon VA developed a Virginia-specific network operations loading to add to its overall common overhead factor. This included the $106 million in

network expenses removed from the Network Factor and the removal of total 1999 Virginia-specific LNP revenue. *Order* ¶ 146 n.401, ¶ 160. Since it is not appropriate to divide the Virginia-specific expenses by total Verizon Company expenses, Verizon VA developed Virginia-specific Total Company Costs as shown on Tab 6 in filename: Part G-2a – CommonbaW99 COM 12.95 (Restated FCC) 9-22-03.xls to create a Support Loading element of the new Common Overhead loading. These changes in the aggregate had the effect of producing a new Common Overhead factor (now, more appropriately called the Common Overhead and Support factor) to 13.61 percent.

31. This concludes my declaration.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on October 28, 2003

Patrick A. Garzillo
Patrick A. Garzillo

ATTACHMENT A

EXHIBIT	UNBUNDLED NETWORK ELEMENT - RECURRING		VA FCC Arbitration Compliance Rates October 2003
	Unbundled Sub-Loop Arrangements		
Part B-8	Sub Loop Distribution - 2 Wire - Density Cell 1	$	8.49
Part B-8	Sub Loop Distribution - 2 Wire - Density Cell 2	$	15.38
Part B-8	Sub Loop Distribution - 2 Wire - Density Cell 3	$	28.15
Part B-8	Sub Loop Distribution - 4 Wire - Density Cell 1	$	16.69
Part B-8	Sub Loop Distribution - 4 Wire - Density Cell 2	$	30.54
Part B-8	Sub Loop Distribution - 4 Wire - Density Cell 3	$	56 06
Part B-8	Sub Loop Feeder - DS1 - Density Cell 1	$	122.70
Part B-8	Sub Loop Feeder - DS1 - Density Cell 2	$	136.63
Part B-8	Sub Loop Feeder - DS1 - Density Cell 3	$	139.01
Part B-9	Subloop Feeder - DS3 Density Cell Statewide Average	$	1,120.86
	Unbundled Network Interface Device (NID)		
Part B-11	NID to NID Connection 2 Wire (per NID)	$	0.89
Part B-11	NID to NID Connection 4 Wire (per NID)	$	0.95
Part B-11	Standalone NID - 2 Wire (Per NID)	$	0 89
Part B-11	Standalone NID - 4 Wire (Per NID)	$	0 95
Part B-12	Standalone NID - DS1(Per NID)	$	6 26
Part B-11	UNE Shared NID (Per Line)	$	0 28
	Unbundled xDSL Conditioning & Qualification		
Part B-13	Wideband Test Access	$	1 83
	Unbundled EEL Testing		
Part B-14	2 Wire Analog Test Charge	$	0.38
Part B-14	2 Wire Digital Test Charge	$	0.49
Part B-14	4 Wire Analog Test Charge	$	1 20
Part B-14	1 544 Mbps (DS1) Digital Test Charge	$	2.64
Part B-14	Digital 4 Wire (56 or 64 kbps) Test Charge	$	1.30
	Unbundled EEL IOF		
Part D-2	Voice Grade Fixed includes both ends	$	28.07
Part D-2	Voice Grade per Mile	$	0.13
	Line Sharing/Line Splitting		
	Admin & Support		
Part B-15	Option C	$	4 77
Part B-16	Splitter Equipment Only -Option C	$	3 98
	Nonrecurring		
Part B-15	Splitter Installation	$	1,565.08
	Unbundled OSS rates for Line Sharing and Splitting		
Part B-17	OSS for Line Sharing	$	0 89

EXHIBIT	UNBUNDLED NETWORK ELEMENT - RECURRING	VA FCC Arbitration Compliance Rates October 2003
	Unbundled Line Ports	
Part C-1	POTS/PBX/CTX	$ 2 83
Part C-1	ISDN BRI or Ctx Port	$ 5 99
Part C-1	ISDN PRI Port	$ 118 71
Part C-1	Unbundled Public Access Line Port (UPALP)	$ 2 83
Part C-1	Unbundled Coin Port (UCP)	$ 3 43
Part C-2	SMDI II (Simplified Message Desk Interface) Port	$ 236 35
Part C-3	Switched DS1 Port (DS1 Port with Line Treatment)	$ 42 37
Part C-1	Automatic Identified Outward Dialing (AIOD)	$ 2 37
Part C-1	Direct Inward Dialing and Outward (DID/DOD)	$ 5 22
Part C-4	IDLC Port per Interface Group (TR008/GR303)	$ 243 76
	Unbundled Dedicated Trunk Ports	
Part C-5	Dedicated Trunk Port - End Office	Included in line port
Part C-6	Dedicated Trunk Port - Tandem	$ 23 72
Part C-7	Dedicated Trunk Port - TOPS	$ 13 73
	Unbundled Individual Line Port Features	
	Res/Bus Features	
Part C-1	Call Waiting Display Name and Number	$ 0 0027
Part C-1	Three Way Calling	$ 0 1209
Part C-1	Remote Call Forwarding	$ 2 2924
Part C-1	Calling Number Delivery	$ 0 0029
Part C-1	Calling Number & Name Delivery	$ 0 6901
Part C-1	Anonymous Call Rejection	$ 0.0119
Part C-1	Automatic Recall (Return Call)	$ 0 0945
Part C-1	Call Waiting	$ 0 00002
Part C-1	Automatic Callback (Repeat Call)	$ 0 0936
	Unbundled CENTREX Features	
Part C-1	CTX Intercom	Included in line port
Part C-1	CTX Announcement	$ 0 2488
Part C-1	Ctx 3-Way Conference	$ 0 1209
Part C-1	Ctx Automatic Recall (Return Call)	$ 0 0472
Part C-1	Ctx Distinctive ringing	$ 0.0010
Part C-1	Ctx Loudspeaker Paging	$ 3 0322
Part C-1	Ctx Meet-Me Conference	$ 0 0160
Part C-1	Ctx Selective Call Acceptance	$ 0 0105
Part C-1	Ctx Selective Call Forwarding	$ 0 0026
Part C-1	Ctx Selective Call Rejection	$ 0 0112
Part C-1	Ctx 6-Way Conference	$ 0 4418
Part C-1	Ctx Station Message Detail Record (SMDR)	$ 1 5915
Part C-1	Ctx Repeat Call	$ 0 0936
Part C-1	Ctx Call Transer - All Calls	$ 0.0054
Part C-1	Ctx Call Waiting Terminating (All Calls)	$ 0 00001
Part C-1	Ctx Directed Call Pick-up with Barge-In (Originating)	$ 0 0007
Part C-1	Ctx Executive Busy Override	$ 0 00003
	Unbundled ISDN Features	
Part C-1	ISDN Intercom	Included in line port
Part C-1	ISDN Announcement	$ 3 1143

EXHIBIT	UNBUNDLED NETWORK ELEMENT - RECURRING	VA FCC Arbitration Compliance Rates October 2003	
Part C-1	ISDN 3-Way Calling	$	0.1209
Part C-1	ISDN 6-Way Conference	$	0.2779
Part C-1	ISDN Call Pickup	$	0.0001
Part C-1	ISDN Selective Call Rejection	$	0.0211
Part C-1	ISDN Call Transfer Individual - All Calls (Ftr 578)	$	0 0168
Part C-1	Calling Name and Number Delivery	$	0.6318
	Unbundled Switching- Per MOU		
Part C-8	Originating EO Local Switching per MOU	Included in line port	
Part C-8	Terminating EO Local Switching per MOU	Included in line port	
	Unbundled Tandem Switching		
Part C-8	Tandem Switching MOU	$	0.000020
	Unbundled Common Trunk Ports		
Part C-8	Common Trunk Port - End Office (per mou)	Included in line port	
Part C-8	Common Trunk Port - Tandem (per mou)	$	0.000107
Part C-8	Common Trunk Port - TOPS (per mou)	$	0.000068
	Unbundled Common Transport		
Part C-9	Fixed - Common	$	0.000073
Part C-9	Per Mile	$	0.000003
	Unbundled Reciprocal Compensation		
Part C-10	Meet Point A End Office (per mou)	$	0.000927
Part C-10	Meet Point B End Office (per mou)	$	0 001237
	Unbundled Dedicated Transport		
	Entrance Facilities		
Part D-1	DS-3 Entrance Facility	$	412.42
Part D-1	STS-1 Entrance Facility	$	414 56
Part D-1	OC-3 Entrance Facility	$	939 79
Part D-1	OC-12 Entrance Facility	$	3,026 49
	IOF		
	Option 1		
Part D-2	DS-1 Fixed includes both ends	$	41.85
Part D-2	DS-1 per Mile	$	3 02
Part D-2	DS-3 Fixed includes both ends	$	314 10
Part D-2	DS-3 per Mile	$	42.71
Part D-2	STS-1 - Fixed includes both ends	$	317.80
Part D-2	STS-1 - per mile	$	42 93
Part D-2	OC-3 - Fixed includes both ends	$	1,119.65
Part D-2	OC-3 - per mile	$	141 71
Part D-2	OC-12 - Fixed includes both ends	$	3,409.49
Part D-2	OC-12 - per mile	$	317 73
	Option 2		
Part D-2	DS-1 Fixed includes both ends	$	27 39
Part D-2	DS-1 per Mile	$	3.02
Part D-2	DS-3 Fixed includes both ends	$	314 10
Part D-2	DS-3 per Mile	$	42 71

EXHIBIT	UNBUNDLED NETWORK ELEMENT - RECURRING	VA FCC Arbitration Compliance Rates October 2003	
Part D-2	STS-1 - Fixed includes both ends	$	317 80
Part D-2	STS-1 - per mile	$	42 93
Part D-2	OC-3 - Fixed includes both ends	$	1,119 65
Part D-2	OC-3 - per mile	$	141 71
Part D-2	OC-12 - Fixed includes both ends	$	3,409 49
Part D-2	OC-12 - per mile	$	317 73
	Option 3		
Part D-2	DS-1 Fixed includes both ends	$	53 80
Part D-2	DS-1 per Mile	$	3 02
Part D-2	DS-3 Fixed includes both ends	$	295 23
Part D-2	DS-3 per Mile	$	42.71
Part D-2	STS-1 - Fixed includes both ends	$	298.94
Part D-2	STS-1 - per mile	$	42 93
Part D-2	OC-3 - Fixed includes both ends	$	1,058 68
Part D-2	OC-3 - per mile	$	141 71
Part D-2	OC-12 - Fixed includes both ends	$	3,409 49
Part D-2	OC-12 - per mile	$	317 73
	Option 4		
Part D-2	DS-1 Fixed includes both ends	Note	DS0 w/o mux
Part D-2	DS-1 per Mile		or DCS is DS3
Part D-2	DS-3 Fixed includes both ends	$	295 23
Part D-2	DS-3 per Mile	$	42.71
Part D-2	STS-1 - Fixed includes both ends	$	298.94
Part D-2	STS-1 - per mile	$	42 93
Part D-2	OC-3 - Fixed includes both ends	$	1,058.68
Part D-2	OC-3 - per mile	$	141 71
Part D-2	OC-12 - Fixed includes both ends	$	3,409.49
Part D-2	OC-12 - per mile	$	317 73
	Unbundled SS7		
Part E-1	STP Port - Monthly per Port	$	286 98
Part D-2	SS7 Link per Mile	$	0.13
	Unbundled Signaling Databases		
	800 Database		
Part E-2	Basic Per Query	$	0 0001847
Part E-2	Vertical Query	$	0 0001847
	LIDB		
Part E-3	Calling Card per query	$	0.018319
Part E-3	Billed Number Screening per query	$	0 018319
	Unbundled Dark Fiber - IOF		
	Verizon C.O. to Verizon C.O.		
Part F-1	Serving Wire Center ("SWC") Charge / SWC / Pair	$	13 45
Part F-1	Inter Office Per Mile	$	131 00
	Verizon C O. to CLEC C.O		
Part F-1	Serving Wire Center ("SWC") Charge / SWC / Pair	$	13 45
Part F-1	Channel Termination Charge/CLEC CO	$	155 89

EXHIBIT	UNBUNDLED NETWORK ELEMENT - RECURRING	VA FCC Arbitration Compliance Rates October 2003	
	Unbundled Dark Fiber - Loop		
Part F-1	Serving Wire Center Charge / SWC / Pair	$	13 45
Part F-1	Loop Charge/Pair per Rate Group		
Part F-1	Loop Charge/Pair per Density Cell 1	$	172 01
Part F-1	Loop Charge/Pair per Density Cell 2	$	255.87
Part F-1	Loop Charge/Pair per Density Cell 3	$	322.91
Part F-2	**Customized Routing per line per month**	$	0 00113
	Daily Usage File (DUF)		
Part F-3	Per Record Recording	$	0.00111
Part F-3	Per Record Transmitted	$	0 000133
Part F-3	Per Media (Tape or Cartridge)	$	21.36
	SMS (AIN Service Creation)		
	Service Creation Usage		
Part F-4	Remote Access per 24 Hr day	$	2,723.00
Part F-4	On Premise per 24 Hr day	$	2,723.00
Part F-4	Certification and Testing per Hour	$	60.81
Part F-4	Help Desk Support per Hour	$	65 05
Part F-4	**Service Charges**		
Part F-4	Subscription Charges	$	3.36
Part F-4	**Database Queries**		
Part F-4	Network Query	$	0.00038
Part F-4	CLEC Network Query	$	0.00038
Part F-4	CLEC Switch Query	$	0 00038
Part F-4	**Utilization Element**	$	0.00007
Part F-4	**Service Modification**		
Part F-4	DTMF Update Per Change	$	0 01718
Part F-4	Switched Based Announcement	$	0 00089
Part F-4	**Developmental Charges**		
Part F-4	Service Creation Access Ports per month, per Logon ID	$	1,405.49
	Operations Support Systems (per UNE Loop/Platform/Combination or resold line)		
Part F-5	Ongoing and Recovery of one time (during 10 yr Period)	$	0 85
Part F-5	Ongoing only (after 10 yr Period)	$	0 48

ATTACHMENT B

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
GLOBAL INPUTS		**NOTE: The Global input modifications identified below affect VZ Compliance Recurring studies and factor input studies.**	
Cost of Capital	104 Footnote 297	Use cost of capital of 12.95%, debt/equity ratio of 20%/80%, cost of debt of 7.86% and cost of equity of 14.22%	Refer to the VCost DTU global parameter table for compliance values
Depreciation Lives	112, 114	Use asset lives at low end of "safe harbor" range prescribed by FCC. Lives and future net salvage values listed on page 2 of Appendix A	Refer to the VCost Asset Life parameter table for compliance values
Inflation Indices	141 Footnote 390	FCC rejected forward looking adjustments for inflation and productivity	Refer to VCost Inflation and Productivity tables for compliance values
Network Factor	146 & Footnote 401	Included Plant-Specific Moves & Rearrangements and Repair only.	Refer to Part G-7a - VA Network Exp Factors (FCC Restate) 9-2-03.xls
		Increase common overhead factor by $106M to recover Network Operations expense.	Overhead Loading (see page 2) These expenses have been zeroed out. These expenses have been included in the Common Support where the network subfactors (Testing and Network Other) have been zeroed out. Refer to Part G-2a - CommonbaW99 COM 12.95 (Restated FCC) 9-22-03.xls
Network Factor	141	• FCC disallowed forward-looking adjustments [M&R 5% reduction or other] – ordered use of embedded 1999 expense over 1999 CC/BC'd investment • Remove FLC from denominators • Replace FLC with CC/BCs provided in Appendix B [some accts., e.g. intra-building, not provided so used CC/BC = 1.0]	Refer to Part G-7a VA Network Exp Factors (FCC Restate) 9-2-03.xls
Network Factor	157	Eliminate adjustment for non-recurring expenses in ACFs	Refer to Part G-7a - VA Network Exp Factors (FCC Restate) 9-2-03.xls
Network Factor	Appendix B Note	• Switching – Appendix B contained an incorrect end of year investment for 1999 (investment shown as $1,399B and was actually $1,339B) Also, corrected inconsistent use of averaged investments vs end of year investment	In this file, Verizon made the appropriate calculations to develop network factors that replicate the method used in Appendix B

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
		• Circuit – Appendix B uses a different account split than Verizon's sub-accounts of Sub Pair Gain and Digital Other. The account split that Appendix B used could not be replicated using ARMIS data, therefore Verizon used their sub-account detail to develop what the recurring cost studies required as factors (i e., SPG and Other) • Poles and Conduit – Appendix B uses End of Year investments, inconsistent with the cable accounts averaged investments, therefore, Verizon used the average investment method to be consistent with the cable accounts	
Wholesale Marketing	145	Zero out Wholesale Marketing factor	Refer to Part G-5a – MktgFactor 2000TEL Restated FCC xls
	147	Increase Common Overhead factor to recover amount of customer service expense that was included in Wholesale Marketing	Refer to Part G-2a - CommonbaW99 COM 12 95 (Restated FCC) 9-22-03.xls
Other Support	140	Replaced FLC with CC/BC Recalculated Other Support based on compliance capital	Refer to Part G-5d – Rev Prod Invest 9-22-03.xls Refer to Part G-8-VZ2000Wothsupt Updated 9-22-03.xls
Common Support Overhead Loading	104, 112, 114 143 139 146 & Footnote 401	• Ensured COM/Lives used throughout • Developed as an expense to expense factor/loading • Removed FLC • Included annual dollars for Network Operations removed from Network Factor • Included annual dollars for Customer Services removed	Refer to Part G-2a - CommonbaW99 COM 12.95 (Restated FCC) 9-22-03.xls

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
	147	from Marketing Factors	
LNP Adjustment	160	• Remove LNP from all costs • *Note:* VZ implemented as a negative incremental factor applied in the Common Overhead Loading = to the LNP surcharge revenue, assuming that the LNP surcharge was implemented to cover costs only and therefore, revenue is equal to costs	Refer to Part G-2a CommonbaW99 COM 12.95 (Restated FCC) 9-22-03 xls

SWITCHING			
Rate Structure - Flat Rated Line Port	463, 471, 472, 475	Switching rate element will be offered as a flat rate line port	See Part C-1 for Port + Usage Cost Studies, Part C-8 for compilation of total flat rated port and supporting workpapers.
End Office and Tandem Switch Discounts – Getting Started	390 Footnote 1018, 405 Footnote 1057	Use 100% New Discount for Getting Started Costs. Calculation based on Record Request 32 (VZ Exhibit 216P)	Refer to Part C-8, WP10 for application of each SCIS/MO discount run to investment components within the study. SCIS/MO discount runs may be found on CD #3 under SCIS subdirectory.
End Office and Tandem Switch Discounts – Trunks and SS7	409, 413 Footnotes 1070 and 1071, 415-16, 406 Footnote 1058	Use 85% New and 15% Growth Discount for Trunks and SS7 equipment (Appendix D) Calculation based on Record Request 29 (VZ Exhibit 213P)	Refer to Part C-8, WP10 for application of each SCIS/MO discount run to investment components within the study. SCIS/MO discount runs may be found on CD #3 under SCIS subdirectory
End Office Switch Discounts –	401,403, 406 Footnote 1058	Use 88% New and 12% Growth Discount for "Other" (e.g, Lines) (Appendix C). Calculation based on Record Request 29 (VZ Exhibit 213P)	Refer to Part C-8, WP10 for application of each SCIS/MO discount run to investment components within the study. SCIS/MO discount runs may be found on CD #3 under SCIS subdirectory.

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
"Other"			
Growth Rates – End Office Lines	404, 411	Grow Lines at 2 5% every two years and BH Line Usage at 2.5% every year over twelve year life of the switch	Refer to file "VA UNE Compliance Inputs Assumptions xls" for calculation of growth factors applied to lines and usage Refer to Excel files under SCIS\Inputs for application of those factors to SCIS/MO inputs

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
Growth Rates – End Office Trunks	412, 418	Grow Trunks at 3 0% every two years and BH Trunk Usage at 3 0% every year over twelve year life of the switch	Refer to file "VA UNE Compliance Inputs Assumptions.xls" for calculation of growth factors applied to trunks and usage. Refer to Excel files under SCIS\Inputs for application of those factors to SCIS/MO inputs.
Growth Rates – Tandem Trunks	409, 418-419	Grow Tandem Trunks at 3 0% every two years and BH Tandem Trunk Usage at 5 0% every year over twelve year life of the switch	Refer to file "VA UNE Compliance Inputs Assumptions.xls" for calculation of growth factors applied to trunks and usage. Refer to Excel files under SCIS\Inputs for application of those factors to SCIS/MO inputs
Digital Line Ports	426	Verizon shall use 78.9% GR303 digital ports and 21.1% analog ports	Refer to Excel files under SCIS\Inputs for development of analog/GR303 line inputs to SCIS/MO.
Fill Factors	432, 434 Footnote 1117	Adopt Verizon's proposed analog line port fill for analog and digital ports	Refer to file "VA UNE Compliance Utilization Factor Development.xls" for development of port fills. These fills are carried forward to "VA UNE Compliance inputs for VCost Switching studies xls" and ultimately to the inputs tab of the port studies in VCost.
Fill Factors - weighting	436	Verizon must develop separate weighted average UAFs for lines and trunks based on the mix of lines and trunks used to develop the SCIS investments.	Refer to file "VA UNE Compliance Utilization Factor Development xls" for development of port fills. These fills are carried forward to "VA UNE Compliance inputs for VCost Switching studies xls" and ultimately to the inputs tab of the port studies in VCost.
Right-to-Use Fees	448	Verizon must recalculate its RTU fees excluding the 1999 data.	See Factors development workpapers for exclusion of 1999 data and recalculation of RTU factor. Revised RTU factor applied to ports in "VA UNE Compliance Backup for Switching & Ports.xls," WP16.
Tandem BHAR	456-457, Footnote 1166	Accept Verizon's BHTD ratio, Requires BHAR to be based on 339 equivalent business days.	Refer to "VA UNE Compliance Inputs Assumptions.xls" for development of BHAR using 339 equivalent business days. This value is then used in the Tandem Switching VCost study (see Inputs tab).
Reciprocal Compensation	488, 489	End office switch and shared end office trunk port costs should be excluded from the Meet Point B prices Tandem Meet Point B recip comp prices must include "getting started" and RTU fees (not just UNE Tandem switch usage).	See Part C-10 for recalculation of Recip Comp, Meet Point B is recalculated using the tandem switching costs including getting started and RTU.

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Unbundled Network Element (UNE) or Data Input	Order Cite (Paragraph Reference)	FCC Compliance Issue	Compliance Filing Study References
Features	491 Footnote 1239, 493 Footnote 1239	Vertical feature costs must reflect present value of investments required to reflect input changes made by AT&T (Ex. 12, Pg. 105) and line growth based on 2 5% per year over twelve years	Refer to "VA UNE Compliance Inputs Assumptions xls" for restated inputs. These inputs are used to develop the SCIS/IN feature investments as seen in the ftrsuser dbs database file provided with the SCIS data.

INTEROFFICE FACILITIES			
IOF Dedicated Transport	511, (1)	Establish rates for dedicated transport both with and without DCS and / or multiplexing.	Option 1 complies with order (1) for all speeds of services that uses both DCS and multiplexing in their designs.
IOF Dedicated Transport	511, (2)	Establish rates for dedicated transport with DCS only	Option 2 complies with order (2) The only speed of service that used multiplexing in its design, other than the required OC48 ADM that provides the transport, was DS1. Therefore, we substituted the low design w/ medium on line 84, in the DS1 Cost tab. All other speeds of service above DS1 remained the same.
IOF Dedicated Transport	511, (3)	Establish rates for dedicated transport with multiplexing only	Option 3 complies with order (3). In the DS1, DS3, STS-1, & OC3 Cost tabs, we changed to 100% low complexity, which, eliminates all DCS. OC12 did not have any DCS in the designs
IOF Dedicated Transport	511, (4)	Establish rates for dedicated transport with neither DCS nor multiplexing.	Option 4 complies with order (4) DS1 is the EQ of a DS3 since that is the basic handoff w/o DCS, nor multiplexing Use option 3 results for DS3, STS-1, & OC3 & OC12.
IOF – ADM Loadings	518	Use 3.79 nodes per OC-48 SONET ring. Use 26 ports per node for OC-48 SONET rings, 9 ports per node for OC-3 SONET rings.	IOF models Option 1, 2, & 3. Appears in COE Equipment tab and investments flow through all speeds of service tabs except OC12, which was already at appropriate loading level.
	518	Use inputs for dedicated transport in developing common transport costs.	

ATTACHMENT C

Verizon-Virginia
1999 Investments and Expense

USOA Accts.		Acct. Description	1999 Average Investment in Place	1999 Expenses	1998 C/B	1999 Current Investments	1999 Ratio
A	B	C	D	E	F[1]	G=D*F	H=E/G
6212	2212	COE-Digital	1,295,585,910	40,717,060	0.9012	1,167,582,022	0 0349
		Circuit-DDS	224,098		0.9602	1,557,254,674	
6232	2232	Circuit-Other than DDS	1,621,802,410		0.9703	217,442	
		Circuit-Composite		19,080,010		1,557,472,116	0 0123
6232	2232	Circuit-SPG	607,089,617	7,183,522	0.9602	582,927,450	0.0123
6232	2232	Circuit-Other Digital	726,792,065	10,535,945	0 9602	697,865,741	0.0151
6411	2411	Poles	82,996,404	12,836,260	2.3879	198,187,112	0 0648
6421	2421	Aerial Cable-metallic	426,093,182	49,486,530	1.6178	689,333,549	0 0718
6421	2421	Aerial Cable-fiber	80,558,536	416,060	0 8777	70,706,227	0 0059
6422	2422	Underground-metallic	266,551,578	9,215,479	1.6412	437,464,449	0.0211
6422	2422	Underground-aerial	156,255,040	1,176,054	0 8310	129,847,938	0 0091
6423	2423	Buried-metallic	1,172,630,128	110,772,698	1.3680	1,604,158,015	0 0691
6423	2423	Buried-fiber	625,460,658	718,215	0.9676	605,195,733	0.0012
6441	2441	Conduit	353,092,156	2,483,429	1.8049	637,296,032	0.0039

[1] *There are two different CC/BCs for the sub-accounts contained in the Circuit Composite Factor*

1